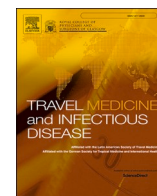




Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Correspondence

Real world and hyper reality

Dear Editor,

We thank the authors for their editorial [1]. It questions the confrontation of results from two radically different approaches when investigating the effect of a treatment, notably during an epidemic.

We opted for massive screening and early treatment of COVID-19 patients using hydroxychloroquine, a drug potentially active, based on results of *in vitro* studies that were the only works available when the epidemic reached Marseille. We added azithromycin which is a reference treatment for bacterial pneumonia and observed that this combination was particularly effective against SARS-CoV-2.

More than 30,000 persons either ill or fearing to be ill, presented to our institute for testing, representing approximately 9% of Marseille population while 2% only of the entire French population was tested [2].

We were surprised, as others, by the discordance between clinical symptoms and actual severity of the disease in patients without perceived dyspnea, but with decreased SaO₂ and CT-Scan images of pneumonia. This strengthened our conviction that all positive patients should be carefully evaluated and treated. Our medical care strategy included oxygen therapy when required, low molecular weight heparin as soon as we knew that coagulopathy and thrombosis were frequent in COVID-19 patients, and antiviral treatment with a combination of hydroxychloroquine and azythromycin that we consider effective against SARS-CoV-2. Nonetheless, we considered patient care as a priority and to this ends, we did not follow the recommendations of the French ministry of health that patients with clinical symptoms of COVID-19 stay at home and be hospitalized only in case of perceived dyspnea [3] which, in our experience, is not a sensitive predictor of severity.

It is noteworthy that for the first time, a higher mortality rate in relation with an epidemic was observed in rich developed countries as compared to developing countries [4], may be because of doggedness in waiting for results of randomized controlled trials. In the context of an epidemic, such a strategy is a mistake. Indeed, in France, none of the ongoing clinical trials generated results, now that the epidemic is over.

Our work evidences the difference between theory and medical practice, showing that randomized controlled trials (a methodology that is usual in the context of chronic diseases) may not replace centenary and sometimes millenary medical practices. The real practice may not be replaced either by big data comparative analysis as those recently

published in very high impact factor medical journals that led immediately to an expression of concern by the editors of the Lancet and of the New England Journal of Medicine [5,6]. Finally, the therapy of this disease during this crisis has been obscured by conflicts between methodologies sometimes used for promoting political opinions or new compounds.

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